Air Quality Permit

Issued to:	Valley Excavating, Sand, and Gravel 3734 McHugh Drive Helena, MT 59602	Permit #3191-01 Complete Application Received: 2/11/04 Preliminary Determination Issued: 3/19/04 Department's Decision Issued: 4/06/04 Permit Final: 4/22/04 AFS#: 777-3191

An air quality permit, with conditions, is hereby granted to Valley Excavating, Sand, and Gravel (Valley), pursuant to Sections 75-2-204 and 211, of the Montana Code Annotated (MCA), as amended, and Administrative Rules of Montana (ARM) 17.8.740, *et seq.*, as amended, for the following:

Section I: Permitted Facilities

A. Permitted Equipment

Valley operates a portable screening operation that will originally locate at the SE¼ of the NW¼ of Section 8, Township 10 North, Range 3 West, in Lewis and Clark County, Montana. However, Permit #3191-01 applies while operating at any location in Montana, except within those areas having a Department of Environmental Quality (Department) approved permitting program, those areas considered tribal lands, or those areas in or within 10 kilometers (km) of certain particulate matter with an aerodynamic diameter of 10 microns or less (PM_{10}) nonattainment areas. An addendum to this air quality permit will be required if Valley intends to locate in or within 10 km of certain PM_{10} nonattainment areas. *A Missoula County air quality permit will be required for locations within Missoula County.* A list of the permitted equipment is contained in Section I.A of the permit analysis.

B. Current Permit Action

On February 11, 2004, Valley submitted a complete permit application for the addition of a crushing/screening unit containing a 1993 EL Russ 2-deck (4'x8') screen plant (maximum capacity 200 tons per hour (TPH)), a 1985 Fab Tec 2-deck (4'x8') screen plant (maximum capacity 60 TPH), a 1998 Armadillo screen plant (maximum capacity 100 TPH), a 36 kilowatt (kW) diesel engine, a 72 kW diesel engine, a 435 kW diesel engine, and associated equipment to the existing screening operation. The Department incorporated the new equipment into the permit with the current permit action. In addition, the permit was updated to reflect the current language and rule references used by the Department.

Section II: Limitations and Conditions

A. Emission Limitations

1. All visible emissions from the portable screening plant and any other associated equipment, such as transfer points, shall not exhibit an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.308 and ARM 17.8.752).

2. Water and spray bars shall be available on site at all times and operated, as necessary, to maintain compliance with the opacity limitation contained in Section II.A.1 (ARM 17.8.752).

3. Valley shall not cause or authorize the use of any street, road, or parking lot without taking reasonable precautions to control emissions of airborne particulate matter (ARM 17.8.308 and ARM 17.8.752).

4. Valley shall treat all unpaved portions of the haul roads, access roads, parking lots, or the general plant area with water and/or chemical dust suppressant, as necessary, to maintain compliance with the reasonable precautions limitation in Section II.A.3 (ARM 17.8.749).

5. Total production of the screening plant shall be limited to 4,686,600 tons during any rolling 12-month time period (ARM 17.8.749).

6. Valley shall not operate more than four screens at any given time and the maximum rated design capacity shall not exceed 535 tons per hour (ARM 17.8.749).

7. If the permitted equipment is used in conjunction with any other equipment owned or operated by Valley, at the same site, production shall be limited to correspond with an emission level that does not exceed 250 tons during any rolling 12-month time period. Any calculations used to establish production levels shall be approved by the Department (ARM 17.8.749).

8. Valley shall comply with all applicable standards, limitations, and the reporting, record keeping, testing, and notification requirements contained in 40 CFR Part 60, Subpart OOO, Standards of Performance for Nonmetallic Mineral Processing Plants, as appropriate (ARM 17.8.340 and 40 CFR Part 60, Subpart OOO).

B. Testing Requirements

1. The Department may require testing (ARM 17.8.105).

2. All compliance source tests shall be conducted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106).

C. Operational Reporting Requirements

1. If the portable screening plant is moved to another location, an Intent to Transfer Form must be sent to the Department. In addition, a Public Notice Form for Change of Location must be published in a newspaper of general circulation in the area where the transfer is to be made, at least 15 days prior to the move. The Intent to Transfer Form and the proof of publication (affidavit) of the Public Notice Form for Change of Location must be submitted to the Department prior to the move. These forms are available from the Department (ARM 17.8.765).

2. Valley shall supply the Department with annual production information for all emission points, as required by the Department in the annual emission inventory request. The request will include, but is not limited to, all sources of emissions identified in the most recent emission inventory report and sources identified in Section I.A of the permit analysis.

   Production information shall be gathered on a calendar-year basis and submitted to the Department by the date required in the emission inventory request. Information shall be in the units required by the Department. This information may be used for calculating operating fees, based on actual emissions from the facility, and/or to verify compliance with permit limitations (ARM 17.8.505).

3. Valley shall notify the Department of any construction or improvement project conducted, pursuant to ARM 17.8.745, that would include a change in control equipment, stack height, stack diameter, stack flow, stack gas temperature, source location, or fuel specifications, or would result in an increase in source capacity above its permitted operation or the addition of a new emission unit. The notice must be submitted to the Department, in writing, 10 days prior to startup or use of the proposed de minimis change, or as soon as reasonably practicable in the event of an unanticipated circumstance causing the de minimis change, and must include the information requested in ARM 17.8.745(l)(d) (ARM 17.8.745).

4. Valley shall maintain on-site records showing daily hours of operation and daily production rates for the last 12 months. All records compiled in accordance with this permit shall be maintained by Valley as a permanent business record for at least 5 years following the date of the measurement, must be submitted to the Department upon request, and must be available at the plant site for inspection by the Department (ARM 17.8.749).

5. Valley shall document, by month, the production of the screening plant. By the 25th day of each month, Valley shall total the production of the screening plant during the previous 12 months to verify compliance with the limitation in Section II.A.5. A written report of the compliance verification shall be submitted along with the annual emissions inventory (ARM 17.8.749).

Section III: General Conditions

A. Inspection - Valley shall allow the Department's representatives access to the source at all reasonable times for the purpose of making inspections or surveys, collecting samples, obtaining data, auditing any monitoring equipment (CEMS, CERMS) or observing any monitoring or testing, and otherwise conducting all necessary functions related to this permit.

B. Waiver - The permit and all the terms, conditions, and matters stated herein shall be deemed accepted if Valley fails to appeal as indicated below.

C. Compliance with Statutes and Regulations - Nothing in this permit shall be construed as relieving Valley of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided in ARM 17.8.740, *et seq*. (ARM 17.8.756).

D. Enforcement - Violations of limitations, conditions and requirements contained herein may constitute grounds for permit revocation, penalties or other enforcement as specified in Section 75-2-401 *et seq*., MCA.

E. Appeals - Any person or persons who are jointly or severally adversely affected by the Department's decision may request, within 15 days after the Department renders its decision, upon affidavit setting forth the grounds therefore, a hearing before the Board of Environmental Review (Board). A hearing shall be held under the provisions of the Montana Administrative Procedures Act. The filing of a request for a hearing postpones the effective date of the Department's decision until the conclusion of the hearing and issuance of a final decision by the Board. The Department's decision on the application is not final unless 15 days have elapsed and there is no request for a hearing under this section.

F. Permit Inspection - As required by ARM 17.8.755 Inspection of Permit, a copy of the air

quality permit shall be made available for inspection by Department personnel at the location of the permitted source.

G. Permit Fee - Pursuant to Section 75-2-220, MCA, as amended by the 1991 Legislature, failure to pay the annual operation fee by Valley may be grounds for revocation of this permit, as required by that section and rules adopted thereunder by the Board.

H. Construction Commencement - Construction must begin within 3 years of permit issuance and proceed with due diligence until the project is complete or the permit shall be revoked.

I. The Department may modify the conditions of this permit based on local conditions of any future site. These factors may include, but are not limited to, local terrain, meteorological conditions, proximity to residences, etc.

J. Valley shall comply with the conditions contained in this permit while operating at any location in Montana, except within those areas that have a Department approved permitting program.

Permit Analysis
Valley Excavating, Sand, and Gravel
Air Quality Permit #3191-01

I. Introduction/Process Description

A. Permitted Equipment

Valley Excavating, Sand, and Gravel (Valley) operates a portable 1993 El Russ 2-deck (4'x8') screen plant (maximum capacity 200 tons per hour (TPH)), a 1985 Fab Tec 2-deck (4'x8') screen plant (maximum capacity 60 TPH) with an attached 36 kilowatt (kW) diesel engine, a 1996 Exatec (4'x9') 2-deck screen plant (maximum capacity 175 TPH) with an attached 72 kW diesel engine, a 1998 Armadillo screen plant (maximum capacity 100 TPH), a diesel engine (up to 435 kW), and associated equipment.

B. Source Description

For a typical operational setup, unprocessed materials are loaded into the feed hopper by a front-end loader or a similar piece of equipment. The hopper deposits the material to the screen, which separates and sizes the aggregate materials. The aggregate materials are then conveyed to another screen, where the process is repeated, until the desired product is separated. Material is then conveyed to stockpile, for sale and use in various construction operations.

C. Permit History

On June 25, 2002, Valley was issued **Permit #3191-00** to operate a portable 1996 Exatec 2-deck screen plant (maximum capacity 175 TPH) and associated equipment.

D. Current Permit Action

On February 11, 2004, Valley submitted a complete permit application for the addition of a crushing/screening unit containing a 1993 EL Russ 2-deck (4'x8') screen plant (maximum capacity 200 TPH), a 1985 Fab Tec 2-deck (4'x8') screen plant (maximum capacity 60 TPH), a 1998 Armadillo screen plant (maximum capacity 100 TPH), a 36 kW diesel engine, a 72 kW diesel engine, a 435 kW diesel engine, and associated equipment to the existing screening operation. The Department of Environmental Quality (Department) incorporated the new equipment into the permit with the current permit action. In addition, the permit was updated to reflect the current language and rule references used by the Department. Permit #**3191-01** replaces Permit #3191-00.

E. Additional Information

Additional information, such as applicable rules and regulations, Best Available Control Technology (BACT) determinations, air quality impacts, and environmental assessments, is included in the permit analysis associated with each change to the permit.

II. Applicable Rules and Regulations

The following are partial explanations of some applicable rules and regulations that apply to the facility. The complete rules are stated in the Administrative Rules of Montana (ARM) and are available, upon request, from the Department. Upon request, the Department will provide references for locations of complete copies of all applicable rules and regulations or copies where appropriate.

A. ARM 17.8, Subchapter 1 - General Provisions, including, but not limited to:

1. ARM 17.8.101 Definitions. This rule includes a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.

2. ARM 17.8.105 Testing Requirements. Any person or persons responsible for the emissions of any air contaminant into the outdoor atmosphere shall, upon written request of the Department, provide the facilities and necessary equipment (including instruments and sensing devices) and shall conduct tests, emission or ambient, for such periods of time as may be necessary using methods approved by the Department.

3. ARM 17.8.106 Source Testing Protocol. The requirements of this rule apply to any emission source testing conducted by the Department, any source, or other entity as required by any rule in this chapter, or any permit or order issued pursuant to this chapter, or the provisions of the Clean Air Act of Montana, 75-2-101, *et seq.*, Montana Code Annotated (MCA).

   Valley shall comply with the requirements contained in the Montana Source Test Protocol and Procedures Manual, including, but not limited to, using the proper test methods and supplying the required reports. A copy of the Montana Source Test Protocol and Procedures Manual is available from the Department upon request.

4. ARM 17.8.110 Malfunctions. (2) The Department must be notified promptly by telephone whenever a malfunction occurs that can be expected to create emissions in excess of any applicable emission limitation, or to continue for a period greater than 4 hours.

5. ARM 17.8.111 Circumvention. (1) No person shall cause or permit the installation or use of any device or any means which, without resulting in reduction in the total amount of air contaminant emitted, conceals or dilutes an emission of air contaminant which would otherwise violate an air pollution control regulation. (2) No equipment that may produce emissions shall be operated or maintained in such a manner that a public nuisance is created.

B. ARM 17.8, Subchapter 2 - Ambient Air Quality, including but not limited to:

1. ARM 17.8.210 Ambient Air Quality Standards for Sulfur Dioxide
2. ARM 17.8.211 Ambient Air Quality Standards for Nitrogen Dioxide
3. ARM 17.8.212 Ambient Air Quality Standards for Carbon Monoxide
4. ARM 17.8.220 Ambient Air Quality Standard for Settled Particulate Matter
5. ARM 17.8.223 Ambient Air Quality Standard for PM_{10}

Valley must comply with the applicable ambient air quality standards.

C. ARM 17.8, Subchapter 3 - Emission Standards, including, but not limited to:

1. ARM 17.8.304 Visible Air Contaminants. This rule requires that no person may cause or authorize emissions to be discharged into the outdoor atmosphere from any source installed after November 23, 1968, that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes.

2. ARM 17.8.308 Particulate Matter, Airborne. (1) This rule requires an opacity limitation of less than 20% for all fugitive emission sources and that reasonable precautions be taken to control emissions of airborne particulate matter. (2) Under this rule, Valley shall not cause or authorize the use of any street, road, or parking lot without taking reasonable precautions to control emissions of airborne particulate matter.

3. ARM 17.8.309 Particulate Matter, Fuel Burning Equipment. This rule requires that no person shall cause or authorize to be discharged into the atmosphere particulate matter caused by the combustion of fuel in excess of the amount determined by this rule.

4. ARM 17.8.310 Particulate Matter, Industrial Process. This rule requires that no person shall cause or authorize to be discharged into the atmosphere particulate matter in excess of the amount set forth in this section.

5. ARM 17.8.322 Sulfur Oxide Emissions--Sulfur in Fuel. This rule requires that no person shall burn liquid, solid, or gaseous fuel in excess of the amount set forth in this rule.

6. ARM 17.8.324 Hydrocarbon Emissions--Petroleum Products. (3) No person shall load or permit the loading of gasoline into any stationary tank with a capacity of 250 gallons or more from any tank truck or trailer, except through a permanent submerged fill pipe, unless such tank truck or trailer is equipped with a vapor loss control device as described in (1) of this rule.

7. ARM 17.8.340 Standards of Performance for New Stationary Sources. This rule incorporates, by reference, 40 CFR Part 60, Standards of Performance for New Stationary Sources (NSPS). The owner or operator of any stationary source or modification, as defined and applied in 40 CFR Part 60, NSPS, shall comply with the standards and provisions of 40 CFR Part 60. Based on the information submitted by Valley, this operation is a stand-alone screen operation, with no crushing units. Therefore, NSPS requirements (40 CFR Part 60, Subpart A General Provisions, and Subpart OOO Non-Metallic Mineral Processing Plants) do not apply, but would become applicable if a crushing unit with a capacity of greater than 150 TPH were added.

D. ARM 17.8, Subchapter 5 - Air Quality Permit Application, Operation, and Open Burning Fees, including, but not limited to:

1. ARM 17.8.504 Air Quality Permit Application Fees. This rule requires that Valley submit an air quality permit application fee concurrent with the submittal of an air quality permit application. A permit application is incomplete until the proper application fee is paid to the Department. Valley submitted the appropriate permit application fee for the current permit action.

2. ARM 17.8.505 Air Quality Operation Fees. An annual air quality operation fee must, as a condition of continued operation, be submitted to the Department by each source of air contaminants holding an air quality permit, excluding an open burning permit, issued by the Department. The air quality operation fee is based on the actual or estimated actual amount of air pollutants emitted during the previous calendar year.

An air quality operation fee is separate and distinct from an air quality permit application fee. The annual assessment and collection of the air quality operation fee, described above, shall take place on a calendar-year basis. The Department may insert into any final permit issued after the effective date of these rules, such conditions as may be necessary to require the payment of an air quality operation fee on a calendar-year basis, including provisions which pro-rate the required fee amount.

E. ARM 17.8, Subchapter 7 - Permit, Construction and Operation of Air Contaminant Sources, including, but not limited to:

1. ARM 17.8.740 Definitions. This rule is a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.

2. ARM 17.8.743 Montana Air Quality Permits--When Required. This rule requires a person to obtain an air quality permit or permit alteration to construct, modify, or use any asphalt plant, crusher, or screen that has the Potential to Emit (PTE) greater than 15 tons per year of any pollutant. Valley has a PTE greater than 15 tons per year of total particulate matter (PM), particulate matter with an aerodynamic diameter of 10 microns or less (PM_{10}), and oxides of nitrogen (NO_x); therefore, an air quality permit is required.

3. ARM 17.8.744 Montana Air Quality Permits--General Exclusions. This rule identifies the activities that are not subject to the Montana Air Quality Permit Program.

4. ARM 17.8.745 Montana Air Quality Permits—Exclusion for De Minimis Changes. This rule identifies the de minimis changes at permitted facilities that do not require a permit under the Montana Air Quality Permit Program.

5. ARM 17.8.748 New or Modified Emitting Units--Permit Application Requirements. (1) This rule requires that a permit application be submitted prior to installation, modification, or use of a source. Valley submitted the required permit application for the current permit action. (7) This rule requires that the applicant notify the public by means of legal publication in a newspaper of general circulation in the area affected by the application for a permit. Valley submitted an affidavit of publication of public notice for the February 19, 2004, issue of the *Independent Record*, a newspaper of general circulation in the Town of Helena in Lewis and Clark County, as proof of compliance with the public notice requirements.

6. ARM 17.8.749 Conditions for Issuance or Denial of Permit. This rule requires that the permits issued by the Department must authorize the construction and operation of the facility or emitting unit subject to the conditions in the permit and the requirements of this subchapter. This rule also requires that the permit must contain any conditions necessary to assure compliance with the Federal Clean Air Act (FCAA), the Clean Air Act of Montana, and rules adopted under those acts.

7. ARM 17.8.752 Emission Control Requirements. This rule requires a source to install the maximum air pollution control capability that is technically practicable and economically feasible, except that BACT shall be utilized. The required BACT analysis is included in Section IV of this permit analysis.

8. ARM 17.8.755 Inspection of Permit. This rule requires that air quality permits shall be made available for inspection by the Department at the location of the source.

9. ARM 17.8.756 Compliance with Other Requirements. This rule states that nothing in the permit shall be construed as relieving Valley of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided in ARM 17.8.740, *et seq*.

10. ARM 17.8.759 Review of Permit Applications. This rule describes the Department's responsibilities for processing permit applications and making permit decisions on those permit applications that do not require the preparation of an environmental impact statement.

11. ARM 17.8.762 Duration of Permit. An air quality permit shall be valid until revoked or modified, as provided in this subchapter, except that a permit issued prior to construction of a new or altered source may contain a condition providing that the permit will expire unless construction is commenced within the time specified in the permit, which in no event may be less than 1 year after the permit is issued.

12. ARM 17.8.763 Revocation of Permit. An air quality permit may be revoked upon written request of Valley, or for violations of any requirement of the Clean Air Act of Montana, rules adopted under the Clean Air Act of Montana, the FCAA, rules adopted under the FCAA, or any applicable requirement contained in the Montana State Implementation Plan (SIP).

13. ARM 17.8.764 Administrative Amendment to Permit. An air quality permit may be amended for changes in any applicable rules and standards adopted by the Board of Environmental Review (Board) or changed conditions of operation at a source or stack that do not result in an increase of emissions as a result of those changed conditions. The owner or operator of a facility may not increase the facility's emissions beyond those found in its permit, unless the increase meets the criteria in ARM 17.8.745 for a de minimis change not requiring a permit, or unless the owner or operator applies for and receives another permit in accordance with ARM 17.8.748, ARM 17.8.749, ARM 17.8.752, ARM 17.8.755, and ARM 17.8.756, and with all applicable requirements in ARM Title 17, Chapter 8, Subchapters 8, 9, and 10.

14. ARM 17.8.765 Transfer of Permit. (1) This rule states that an air quality permit may be transferred from one location to another if the Department receives a complete notice of Intent to Transfer location, the facility will operate in the new location for less than 1 year, the facility will comply with the FCAA and the Clean Air Act of Montana, and the facility complies with other applicable rules. (2) This rule states that an air quality permit may be transferred from one person to another if written notice of Intent to Transfer, including the names of the transferor and the transferee, is sent to the Department.

F. ARM 17.8 Subchapter 8 - Prevention of Significant Deterioration of Air Quality, including, but not limited to:

1. ARM 17.8.801 Definitions. This rule is a list of applicable definitions used in this subchapter.

2. ARM 17.8.818 Review of Major Stationary Sources and Major Modifications--Source Applicability and Exemptions. The requirements contained in ARM 17.8.819 through ARM 17.8.827 shall apply to any major stationary source and any major modification with respect to each pollutant subject to regulation under the FCAA that it would emit, except as this subchapter would otherwise allow.

This facility is not a major stationary source since it is not a listed source and the facility's PTE is less than 250 tons per year (excluding fugitive emissions) of any air pollutant.

G. ARM 17.8, Subchapter 12 - Operating Permit Program Applicability, including, but not limited to:

1. ARM 17.8.1201 Definitions. (23) Major Source under Section 7412 of the FCAA is defined as any stationary source having:

a. PTE > 100 tons/year of any criteria pollutant.

b. PTE > 10 tons/year of any one Hazardous Air Pollutant (HAP), PTE > 25 tons/year of a combination of all HAPs, or a lesser quantity as the Department may establish by rule.

c. PTE > 70 tons/year of PM_{10} in a serious PM_{10} nonattainment area.

2. ARM 17.8.1204 Air Quality Operating Permit Program Applicability. Title V of the FCAA Amendments of 1990 requires that all sources, as defined in ARM 17.8.1204 (1), obtain a Title V Operating Permit. In reviewing and issuing Air Quality Permit #3191-01 for Valley, the following conclusions were made:

a. The facility's PTE is less than 100 tons/year for any criteria pollutant.

b. The facility's PTE is less than 10 tons/year of any one HAP and less than 25 tons/year of all HAPs;

c. This source is not located in a serious PM_{10} nonattainment area;

d. This facility is not subject to any current NSPS standards.

e. This facility is not subject to any current NESHAP standards.

f. This source is not a Title IV affected source nor a solid waste combustion unit.

g. This source is not an EPA designated Title V source.

Based on these facts, the Department determined that Valley will be a minor source of emissions as defined under the Title V Operating Permit Program.

III. BACT Determination

A BACT determination is required for any new or altered source. Valley shall install on the new or altered source, the maximum air pollution control capability that is technologically practicable and economically feasible, except that BACT shall be utilized.

Two types of emissions controls are readily available and used for dust suppression at the site and surrounding area of operations. These two control methods are water and chemical dust suppressant. Chemical dust suppressant can be used for dust suppression on the area surrounding the screening equipment and for emissions on the screening operations. However, because water

is more readily available, is more cost effective, is as effective as chemical dust suppressant in controlling emissions upon the surrounding area of operations, is more environmentally friendly, and is more effective in controlling emissions from equipment operations, water has been identified as the most appropriate method of pollution control of particulate emissions from screening operations and operations in the general plant area. However, Valley may use chemical dust suppressant to assist in controlling particulate emissions from the surrounding plant area.

All visible emissions from the portable screening plant may not exhibit an opacity of 20% or greater averaged over 6 consecutive minutes. Valley must also take reasonable precautions to limit the fugitive emissions of airborne particulate matter from haul roads, access roads, parking areas, the general area of operation, or from equipment associated with the portable screening plant. The Department determined that using water spray bars and water and chemical dust suppressant to maintain compliance with the opacity requirements and reasonable precaution limitations constitutes BACT for the crushing/screening operations.

Due to the amount of PM, PM_{10}, NO_x, carbon monoxide (CO), volatile organic compounds (VOC), and sulfur oxides (SO_x) emissions produced by the diesel generator, add-on controls would be cost prohibitive. The source is relatively small and would be required to comply with operational limits as outlined in Permit #3191-01. Thus, the Department determined that no additional control constitutes BACT for the generator. The control options selected have controls and control costs similar to other recently permitted similar sources and these controls are capable of achieving the established emissions limits.

IV. Emission Inventory

	Tons/Year					
Source	**PM**	**PM_{10}**	**NO_x**	**VOC**	**CO**	**SO_x**
1996 Exatec (4'x9') 2-deck screen (up to 175 TPH)	12.07	5.75				
1998 Armadillo screen (up to 100 TPH)	6.90	3.29				
1993 EL Russ (4'x8') 2-deck screen (up to 200 TPH)	13.80	6.57				
1985 Fab Tec 2-deck (4'x8') screen (up to 60 TPH)	4.14	1.97				
Material Transfer	19.05	9.20				
Pile Forming	22.08	10.51				
Bulk Loading	3.68	1.75				
Diesel Engine (up to 36 kW)	0.47	0.47	6.55	0.52	7.74	0.43
Diesel Engine (up to 72 kW)	0.93	0.93	13.11	1.04	2.82	0.87
Diesel Engine (up to 435 kW)	5.62	5.62	79.21	6.31	17.07	5.24
Haul Roads	2.74	1.23				
Total	91.48	47.29	98.87	7.87	27.63	6.54

* A complete emission inventory for Permit #3191-01 is on file with the Department.

V. Existing Air Quality

Permit #3304-00 will cover this portable crushing/screening plant while operating in areas classified as attainment or unclassified for ambient air quality standards, including for the proposed initial site location (the SE¼ of the NW¼ of Section 8, Township 10 North, Range 3 West, in Lewis and Clark County, Montana). This facility is not currently allowed to operate in areas designated as nonattainment for PM_{10}.

VI. Air Quality Impacts

Based on the information provided by Valley and the conditions established in Permit #3191-01, the amount of controlled emissions generated by this facility will not exceed any set ambient air quality standards. In addition, this source is portable and any air quality impacts will be minimal. Included in the permit are operational conditions and limitations that would protect air quality for this site and the surrounding area. Also, this facility is a portable source that would operate on an intermittent and temporary basis and any effects to air quality will be minor and short-lived.

VII. Taking or Damaging Implication Analysis

As required by Section 2-10-101 through 105, Montana Code Annotated (MCA), the Department conducted a private property taking and damaging assessment and determined there are no taking or damaging implications.

VIII. Environmental Assessment

An environmental assessment, required by the Montana Environmental Policy Act, was completed for this project. A copy is attached.

DEPARTMENT OF ENVIRONMENTAL QUALITY
Permitting and Compliance Division
Air Resources Management Bureau
P.O. Box 200901, Helena, Montana 59620
(406) 444-3490

FINAL ENVIRONMENTAL ASSESSMENT (EA)

Issued to: Valley Excavating, Sand, and Gravel
3734 McHugh Drive
Helena, MT 59602

Air Quality Permit Number: 3191-01

Preliminary Determination Issued: 3/19/04
Department Decision Issue: 4/06/04
Permit Final: 4/22/04

1. *Legal Description of Site*: Valley submitted a permit application to operate a portable screening plant that would originally locate in the SE¼ of the NW¼ of Section 8, Township 10 North, Range 3 West, in Lewis and Clark County, Montana. However, Permit #3191-01 applies while operating at any location in Montana, except within those areas having a Department approved permitting program, those areas considered tribal lands, or those areas in or within 10 kilometers (km) of certain particulate matter with an aerodynamic diameter of 10 microns or less (PM_{10}) nonattainment areas. An addendum to this air quality permit will be required if Valley intends to locate in or within 10 km of certain PM_{10} nonattainment areas. *A Missoula County air quality permit will be required for locations within Missoula County.*

2. *Description of Project:* Valley proposes to use this screening facility to screen and sort sand and gravel materials for use in various construction operations. For a typical operational setup, unprocessed materials are loaded into the feed hopper by a front-end loader or a similar piece of equipment. The hopper deposits the material to the screen, which separates and sizes the aggregate materials. The aggregate materials are then conveyed to another screen, where the process is repeated, until the desired product is separated. Material is then conveyed to stockpile, for sale and use in various construction operations.

3. *Objectives of the Project:* Valley, in an effort to increase business and revenue for the company through the construction and use of their screening operation, submitted a complete application for a screening operation. The screening operation would be used to supply aggregate to various construction projects and would allow Valley to operate the portable equipment at various locations throughout Montana, including the proposed initial site location.

4. *Additional Project Site Information:* In many cases, the screening plant may move to a general site location, or open cut pit, which has been previously permitted through the Industrial and Energy Minerals Bureau (IEMB). If this were the case, a more extensive EA for the site would have been conducted and would be found in the Mined Land Reclamation Permit for that specific site.

5. *Alternatives Considered:* In addition to the proposed action, the Department also considered the "no-action" alternative. The "no-action" alternative would deny issuance of the air quality preconstruction permit to the proposed facility. However, the Department does not consider the "no-action" alternative to be appropriate because Valley demonstrated compliance with all applicable rules and regulations as required for permit issuance. Therefore, the "no-action" alternative was eliminated from further consideration.

6. *A Listing of Mitigation, Stipulations, and Other Controls:* A list of enforceable conditions, including a BACT analysis, would be contained in Permit #3191-01.

7. *Regulatory Effects on Private Property:* The Department considered alternatives to the conditions imposed in this permit as part of the permit development. The Department determined that the permit conditions would be reasonably necessary to ensure compliance with applicable requirements and demonstrate compliance with those requirements and would not unduly restrict private property rights.

8. *The following table summarizes the potential physical and biological effects of the proposed project on the human environment. The "no action alternative" was discussed previously.*

		Major	Moderate	Minor	None	Unknown	Comments Included
A.	Terrestrial and Aquatic Life and Habitats			X			yes
B.	Water Quality, Quantity, and Distribution			X			yes
C.	Geology and Soil Quality, Stability, and Moisture			X			yes
D.	Vegetation Cover, Quantity, and Quality			X			yes
E.	Aesthetics			X			yes
F.	Air Quality			X			yes
G.	Unique Endangered, Fragile, or Limited Environmental Resource				X		yes
H.	Demands on Environmental Resource of Water, Air, and Energy			X			yes
I	Historical and Archaeological Sites				X		yes
J.	Cumulative and Secondary Impacts			X			yes

Summary of Comments on Potential Physical and Biological Effects: The following comments have been prepared by the Department.

A. Terrestrial and Aquatic Life and Habitats

Terrestrials would use the same area as the screening operations. Impacts on terrestrials and aquatic life could result from storm water runoff and pollutant deposition, but such impacts would be minor, as the screening operations would be considered a minor source of emissions and would have intermittent and seasonal operations. Furthermore, the air emissions would have only minor effects on terrestrial and aquatic life because facility emissions would be well dispersed in the area of operation (See Section 8.F). Also, the nearest water body (an unnamed stream is over 100 meters away) from the proposed operation. At such distances, only minor and temporary effects to terrestrial and aquatic life would be expected from the proposed screening operation because only minor amounts of pollutants would reach the water body. Therefore, due the minor amount of emissions generated and the dispersion of pollutant emissions, only minor and temporary effects and aquatic life and habitat would be expected from the proposed screening operation.

B. Water Quality, Quantity, and Distribution

Water would be required for dust suppression on the surrounding roadways and areas of operation and for pollution control for equipment operations. However, water use would only cause a minor surface disturbance to this proposed operational site, since only minor amounts of water would be required to be used for pollution control. Therefore, at most, only minor surface and groundwater quality impacts would be expected as a result of using water for dust suppression because only small amounts of water would be required and deposition of air pollutants upon surrounding water bodies would be minor (See Section 8.F).

C. Geology and Soil Quality, Stability, and Moisture

The screening operations would only have minor impacts on geology and soil quality, stability, and moisture because the screening facility would generally locate within a previously disturbed open-cut pit. The deposition of air pollutants on soils would be minor (See Section 8.F) because operations would be seasonal and intermittent, relatively small amounts of pollution would be generated, and air pollutant dispersion would greatly minimize the impacts from the pollution on the surrounding soils. Facility construction, aggregate mining, and traffic operating within the site may cause soil compaction that could impact water infiltration and surface water runoff at the site. However, such impacts would be minor and would only have minor effects upon soils (geology and soil quality, stability, and moisture) and water resources (water quality, quantity, and distribution) at the site.

D. Vegetation Cover, Quantity, and Quality

Minor, if any impacts would occur on vegetative cover, quality, and quantity because the facility would operate at a site where vegetation has been previously removed/disturbed. The facility would be a relatively minor source of emissions and the pollutants would be greatly dispersed (See Section 8.F); therefore, deposition on vegetation from the proposed project would be minor. Also, because the water usage would be minimal (See Section 8.B) and the associated soil disturbance from the application of water and any runoff would be minimal (See Section 8.C), corresponding vegetative impacts would be minor.

E. Aesthetics

The screening operation would be visible and would create additional noise while operating in the initial proposed site location. However, Permit #3191-01 would include conditions limiting the opacity of the plant, as well as conditions requiring water spray bars and other means to control air pollution. Also, because the screening operation would be portable, would operate on an intermittent and seasonal basis, any visual and noise impacts would be minor and short-lived.

F. Air Quality

The air quality impacts from the proposed project would be minor because the facility would be relatively small, would operate on an intermittent and temporary basis, and would locate in a previously disturbed site. However, Permit #3191-01 would include conditions limiting the facility's opacity and the screening production from the plant, as well as conditions requiring water spray bars to control air pollution. In addition, water spray would be required to control emissions from haul roads, access roads, parking lots, and the general work area. Permit #3191-01 would also limit total emissions from the screening facility and any additional Valley equipment operated at the site to 250 tons/year or less, excluding fugitive emissions.

Further, the Department determined that the screening facility would be a minor source of emissions as defined under the Title V Operating Permit Program because the source's PTE is below the major source threshold level of 100 tons per year for any regulated pollutant.

Pollutant deposition from the facility would be minimal and the pollutants emitted from the facility would be widely dispersed (from factors such as wind speed and wind direction). Also, because of the lack of vegetative cover at the site and the relatively flat topography of the site, pollutant deposition upon any given area would also be minimal. Therefore, good ventilation of pollutant emissions would only have minor effects upon surrounding soils, vegetation, water resources, human populations, and terrestrial and aquatic life. Air quality impacts from operating the screening equipment in this area would be minor.

G. Unique Endangered, Fragile, or Limited Environmental Resources

The Department, in an effort to assess any potential impacts to any unique endangered, fragile, or limited environmental resources in the initial proposed area of operations, contacted the Montana Natural Heritage Program (MNHP) to identify any species of concern associated with the initial proposed site location (the SE¼ of the NW¼ of Section 8, Township 10 North, Range 3 West, in Lewis and Clark County, Montana). Search results concluded there are no known environmental resources of special concern within the defined area. The defined area, in this case, is defined by the township and range of the proposed site, with an additional one-mile buffer. Based on the small size and temporary nature of the equipment operations, the fact that the facility operations would take place in a previously mined area, and the minimal disturbance expected to the environment (water, air, and soils), the Department determined no impacts to any unique endangered, fragile, or limited environmental resources would occur.

H. Demands on Environmental Resources of Water, Air, and Energy

Due to the relatively small size of the facility, the screening operation would only require small quantities of water, air, and energy for proper operation. Only small quantities of water would be required for dust suppression. In addition, impacts to air resources would be minor because the source a minor industrial source of pollutant emissions, with intermittent and seasonal operations, and because air pollutants generated by the facility would be widely dispersed (See Section 8.F). Energy requirements would also be small, as the facility would be powered by three small industrial diesel generators that would use minor amounts of fuel. Overall, any impacts to water, air, and energy resources would be minor.

I. Historical and Archaeological Sites

The Department previously contacted the Montana Historical Society - State Historical Preservation Office (SHPO) in an effort to identify any historical and/or archaeological sites that may be present in the proposed area of construction/operation. Search results concluded that there are no previously recorded historical or archaeological resources of concern within the area proposed for initial operations. According to past correspondence from SHPO, there would be a low likelihood of adverse disturbance to any known archaeological or historic site given previous industrial disturbance to an area. Therefore, no impacts upon historical or archaeological sites would be expected as a result of operating the proposed screening plant because the site has already been disturbed and because no previously recorded historical/archaeological sites have been identified at the location.

J. Cumulative and Secondary Impacts

The screening operation would cause minor cumulative and secondary impacts to the physical and biological aspects of the human environment because the facility would generate emissions of particulate matter (PM), $PM_{10,}$ oxides of nitrogen (NO_x), volatile organic compound (VOC), carbon monoxide (CO), and sulfur oxide (SO_x). Noise generated from the site would cause minimal impacts because the screening operation would be seasonal and temporary. Additionally, this facility, in combination with other Valley emissions from equipment operations at the site would not be permitted to exceed 250 tons per year of non-fugitive emissions. However, there are no other sources expected to operate as a result of permitting this equipment.

9. The following table summarizes the potential economic and social effects of the proposed project on the human environment. The "no action alternative" was discussed previously.

		Major	Moderate	Minor	None	Unknown	Comments Included
A.	Social Structures and Mores				X		yes
B.	Cultural Uniqueness and Diversity				X		yes
C.	Local and State Tax Base and Tax Revenue			X			yes
D	Agricultural or Industrial Production			X			yes
E.	Human Health			X			yes
F.	Access to and Quality of Recreational and Wilderness Activities			X			yes
G	Quantity and Distribution of Employment			X			yes
H.	Distribution of Population				X		yes
I.	Demands for Government Services			X			yes
J.	Industrial and Commercial Activity			X			yes
K.	Locally Adopted Environmental Plans and Goals			X			yes
L.	Cumulative and Secondary Impacts			X			yes

SUMMARY OF COMMENTS ON POTENTIAL ECONOMIC AND SOCIAL EFFECTS: The Department has prepared the following comments:

A. Social Structures and Mores

The screening operation would not cause disruption to the social structures and mores in the area because the source would be a minor industrial source of emissions, would be operating at an area currently designated and used for aggregate mining, would be separated from the general population, and would only have temporary and intermittent operations. Further, the facility would be a minor source of air pollution and would be required to operate according to the conditions that would be placed in Permit #3191-01.

B. Cultural Uniqueness and Diversity

The cultural uniqueness and diversity of this area would not be impacted by the proposed screening operation because the proposed site has already been used for the screening of aggregate, is a bermed pit, and the facility would be a portable source, with seasonal and intermittent operations. Therefore, the predominant use of the surrounding area would not change as a result of this project and the cultural uniqueness and diversity of the area would not be affected.

C. Local and State Tax Base and Tax Revenue

The screening operation would have little, if any, impact on the local and state tax base and tax revenue because the facility would be a relatively small industrial source (minor source) and would operate seasonally and intermittently. The facility would require the use of a few existing employees. Thus, only minor impacts to the local and state tax base and revenue could be expected from the employees or from facility production. Furthermore, the impact to local tax base and revenue would be minor because the source would be portable and the money generated for taxes would be widespread.

D. Agricultural or Industrial Production

The facility would locate in an existing permitted open-cut pit, adjacent to an area that could be used for animal grazing and agricultural production. Minimal deposition of air pollutants would occur on the surrounding land (as further explained in Section 8.F of this EA), thus, only minor effects on the surrounding vegetation and agricultural production would occur. Further, the screening operations would have only a minor impact on local industrial production since the facility would be a minor source of aggregate production and air emissions. Also, the facility operations would be small and temporary in nature and would be permitted with operational conditions and limitations that would further minimize impacts upon surrounding vegetation, as described in Section 8.D of this EA. Therefore, impacts from the screening operations upon agricultural and industrial production would be minor.

E. Human Health

Permit #3191-01 would incorporate conditions to ensure that the screening facility would be operated in compliance with all applicable air quality rules and standards. These rules and standards are designed to be protective of human health. As described in Section 8.F of this EA, the air emissions from this facility would be minimized by the use of water spray and other process limits that would be required by Permit #3191-01. Also, the facility would be operating on a temporary and intermittent basis and pollutants from the ventilation of emissions at this site (see Section 8.F of this EA). Therefore, only minor impacts would be expected on human health from the proposed screening facility.

F. Access to and Quality of Recreational and Wilderness Activities

The screening plant would be operated adjacent to an existing roadway. The facility would also operate within the confines of an existing open-cut pit. Therefore, no impacts upon access to recreational and wilderness activities would result. However, minor effects on the quality of recreational and wilderness activities would occur. Associated effects from noise or facility emissions would occur, but would be minor because the facility would operate within the confines of an existing open-cut pit, would operate near a transportation route, would operate in an industrial area where little recreational opportunity exists, and would operate on a seasonal and intermittent basis. Therefore, any changes in the quality of recreational and wilderness activities,

created by noise generated by operating the equipment at the site, would be minor and intermittent.

G. Quantity and Distribution of Employment

The portable screening operation is relatively small in size, would have seasonal and intermittent operation, and would require only a few employees to operate. No individuals would be expected to permanently relocate to this area of operation as a result of operating the screening facility. Therefore, no effects upon the quantity and distribution of employment in this area would be expected.

H. Distribution of Population

The portable screening operation is small and would only require a few existing employees to operate. No individuals would be expected to permanently relocate to the area of operation as a result of operating the screening facility. Therefore, the screening facility would not disrupt the normal population distribution.

I. Demands of Government Services

Minor increases would be seen in traffic on existing roadways in the area while the screening operation is in progress. In addition, government services would be required for acquiring the appropriate permits for the proposed project and to verify compliance with the permits that would be issued. However, demands for government services would be minor, due to the relatively small size and seasonal nature of the screening facility.

J. Industrial and Commercial Activity

The screening operation would represent only a minor increase in the industrial activity in the proposed area because the source would be a relatively small industrial source and would be portable and temporary in nature. No additional industrial or commercial activity would be expected as a result of the proposed operation.

K. Locally Adopted Environmental Plans and Goals

Valley would be allowed, by Permit #3191-01, to operate in areas designated by the Environmental Protection Agency (EPA) as attainment or unclassified. The permitted production limits and opacity limits would be protective of air quality while the facility is operating at these permitted locations. Because the facility would be a small and portable source and would have intermittent and seasonal operations, any impacts from the facility would be minor and short-lived.

L. Cumulative and Secondary Impacts

The screening operations would cause minor cumulative and secondary impacts to the social and economic aspects of the human environment in the immediate area because the source is a portable, temporary source. Further, no other industrial operations are expected to result from the permitting of this facility. Minor increases in traffic would have minor effects on local traffic in the immediate area. Because the source is relatively small and temporary, only minor economic impacts to the local economy would be expected from operating the facility. Further, this facility may be operated in conjunction with other equipment owned and operated by Valley, but any cumulative impacts upon the social and economic aspects of the human environment would be

minor and short-lived. Thus, only minor and temporary cumulative effects would result to the local economy.

Recommendation: An EIS is not required.

If an EIS is not required, explain why the EA is an appropriate level of analysis: All potential effects resulting from construction and operation of the proposed facility are minor; therefore, an EIS is not required.

Other groups or agencies contacted or which may have overlapping jurisdiction: Department of Environmental Quality - Permitting and Compliance Division (Industrial and Energy Minerals Bureau); Montana Natural Heritage Program; and the State Historic Preservation Office (Montana Historical Society).

Individuals or groups contributing to this EA: Department of Environmental Quality (Air Resources Management Bureau and Industrial and Energy Minerals Bureau), Montana Natural Heritage Program, and State Historic Preservation Office (Montana Historical Society).

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